Confusion may arise as a result of local nomenclature. *B. undatum* is known as the whelk, buckie, and mutlog; *N. antiqua* is known as the red whelk, almond, buckie, mutlog (Manx), barnagh (Irish), and spindle shell; and *L. littorea* is known as the winkle, periwinkle, buckie (Scots), and wilk (Scots), the latter derived direct from M. E. Wilke.

There is not as yet a problem in the United Kingdom, but with the growth in popularity of aqualung diving there is an increased possibility that divers hunting for edible shellfish and crustacea may collect *N. antiqua*. There is also a very remote possibility that developments in the fishing industry might lead to an attempt to harvest this gastropod on a commercial scale because of the quantity of edible meat obtainable. I am informed that the red whelk is eaten in some areas as it forms a small proportion of catches of edible whelk. So long as the organism is small there would appear to be little danger of serious toxic effects because of the obvious quantitative effect of the toxin. In the case described above, however, the shellfish consumed were all large, the shells being 5-6 in (13-15 cm) long, and the quantitative effect appears to have been responsible for the transient paralysis, which was a feature not described in the literature.

I have to thank Dr. A. H. Lauder for the case history, Professor M. S. Laverack for providing biological information about *N. antiqua*, and Dr. G. S. Riddell for his advice and permission to report the case.

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An XYY Individual of Average Height

J. KAHN, T. COATES, JOYCE M. MAXWELL,
D. E. MUTTON, FRED A. S. REED

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We report the case of an XYY individual of average height. He was diagnosed during a cytogenetic survey of 175 factory apprentices.

Case Report

The patient was born on 12 March 1954. In 1965 he and his brother (now aged 18) and two sisters (now aged 20 and 17) were adopted by a paternal aunt. He received a secondary modern education and left school at 15. For the first year his employment record was poor. On 28 July 1969 he was employed as a labourer, being dismissed in August. On 8 September he was employed as a labourer by a different firm, again being dismissed four days later. On 25 September he started as a labourer with a third firm, being dismissed on 10 October. On 13 October a fourth firm employed him as a labourer; he was dismissed in November. He was then again employed as a labourer, being dismissed on 26 June 1970. On 29 June he took up his current apprenticeship at a large paper mill and so far has not been dismissed (August 1971).

In October 1970 he was committed to a juvenile court for theft of milk and butter; he pleaded guilty and was fined £5. At the time of his offence he was earning an average weekly wage of £11 and was residing with his adoptive parents, to whom he paid £3 a week for his keep. One of the sisters of the factory's medical centre visited the family and found the home pleasant and well kept.

The boy's medical history was unremarkable. His father was born in 1919 and his mother in 1918. His height and weight were measured during two clinical examinations made by T.C. in 1970—1 July, 5 ft 6½ in, 9 st 7¼ lb (169 cm, 60 kg); 9 November, 5 ft 7¼ in, 9 st 7¼ lb (172 cm, 60.7 kg). He was a healthy-looking teenager. A tattoo was present on the skin of the right forearm, and a para-umbilical herniorrhaphy scar was noted. Apart from a blood pressure of 120/80 mm Hg all systems were normal. Measurements of bone age were done by the method of Tanner, Whitehouse, and Healy (1962), and the x-ray film of the hand and wrist was kindly rated by Mr. Whitehouse. Bone age of 15.6 years was within normal range compared with the chronological age of 16.7 years.

Cytogenetic Data.—Blood samples were collected from factory apprentices to serve as controls in a current survey of Borstal boys. After collection the samples were pooled and given a random code number. The XYY diagnosis was made on 10 cells. The random number was decoded and a second sample was obtained. Analysis of 10 cells from the new sample confirmed the previous XYY diagnosis. In both samples the Y chromosomes were easily identifiable as the longest elements in the G/Y group. Diagnosis was also confirmed with the aid of fluorescence microscopy. The size of the fluorescing bodies in interphase nuclei again suggested somewhat larger than average Y chromosomes.

Comment

This patient is of special interest because of his average height and unremarkable clinical history. It was not possible to assess his height in relation to the heights of his parents, and the possibility of undetected mosaicism cannot be excluded.

At this stage of our survey we have insufficient information on our sample of apprentices to evaluate the significance of the patient's minor offence and poor initial record of employment. This case illustrates that in order to obtain a better estimate of the frequency of XYY individuals it is necessary to study a cross-section of all heights of any given population.

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Institute of Psychiatry, London S.E.5

J. KAHN, PH.D., Lecturer in Cytogenetics
JOYCE M. MAXWELL, Junior Technical Officer
FRED A. S. REED, M.B., D.P.M., Research Assistant

Reede International Ltd., Larkfield, Kent

T. COATES, M.B., D.I.H., Senior Medical Officer

Guy's Hospital Medical School, London S.E.1

D. E. MUTTON, B.Sc., Department of Paediatric Research